

Claims

1. A system, comprising:
  - (a) an anti-backlash nut having a tapered surface at one end thereof;
  - (b) a drive nut having a complementary tapered surface engaging said tapered surface on said anti-backlash nut; and
  - (c) biasing means urging said tapered surfaces together.
2. A system, as defined in Claim 1, wherein: said tapered surface on said anti-backlash nut is about 30 degrees from horizontal.
3. A system, as defined in Claim 1, wherein: said biasing means surrounds at least a portion of said anti-backlash nut.
4. A system, as defined in Claim 1, wherein: said biasing means surrounds at least portions of said anti-backlash nut and said drive nut.
5. A system, as defined in Claim 1, wherein: said biasing means abuts a surface of said anti-backlash nut opposite said tapered surface.
6. A system, as defined in Claim 5, wherein: said biasing means is molded into said anti-backlash nut.
7. A system, as defined in Claim 5, wherein: said biasing means is adhesively attached to said anti-backlash nut.
8. A system, as defined in Claim 1, wherein: said drive nut is metallic and has a thermoplastic main drive nut molded thereinto.

9. A system, as defined in Claim 1, wherein: said anti-backlash and said drive nuts are internally threaded and have 1. A system, comprising:

- (a) an anti-backlash nut having a tapered surface at one end thereof;
- (b) a drive nut having a complementary tapered surface engaging said tapered surface on said anti-backlash nut; and
- (c) biasing means urging said tapered surfaces together.

10. A system, as defined in Claim 1, wherein: said biasing means is a torsion spring.

11. A system, as defined in Claim 10 wherein: at least one end of said torsion spring is inserted into a hole defined axially in said anti-backlash nut.

12. A system, as defined in Claim 10, wherein: at least one end of said torsion spring is inserted into a channel defined in an outer periphery of said anti-backlash nut.

13. A method of providing a system, comprising::  
(a) providing an anti-backlash nut having a tapered surface at one end thereof;  
(b) providing a drive nut having a complementary tapered surface engaging said tapered surface on said anti-backlash nut; and  
(c) providing biasing means urging said tapered surfaces together.

14. A method of providing a system, as defined in Claim 13, further comprising: providing said tapered surface on said anti-backlash nut about 30 degrees from horizontal.

15. A method of providing a system, as defined in Claim 13, further comprising: providing said biasing means surrounding at least a portion of said anti-backlash nut.

16. A method of providing a system, as defined in Claim 13, further comprising: providing said biasing means surrounding at least portions of said anti-backlash nut and said drive nut.

17. A method of providing a system, as defined in Claim 13, further comprising: providing said biasing means abutting a surface of said anti-backlash nut opposite said tapered surface.

18. A method of providing a system, as defined in Claim 17, further comprising: providing said biasing means molded into said anti-backlash nut.

19. A method of providing a system, as defined in Claim 17, further comprising: providing said biasing means adhesively attached to said anti-backlash nut.

20. A method of providing a system, as defined in Claim 13, further comprising: providing said drive nut as metallic and having a thermoplastic main drive nut molded thereinto.

21. A method of providing a system, as defined in Claim 13, further comprising: providing said anti-backlash and said drive nuts internally threaded and having axial openings therethrough to accommodate a lead screw.

22. A method of providing a system, as defined in Claim 13, further comprising: providing said biasing means as a torsion spring.

23. A method of providing a system, as defined in Claim 22, further comprising: providing at least one end of said torsion spring inserted into a hole defined axially in said anti-backlash nut.

24. A method of providing a system, as defined in Claim 22, further comprising: providing at least one end of said torsion spring inserted into a channel defined in an outer periphery of said anti-backlash nut.